#### **Patent Claims**

## 1. Compounds of the formula (I)

in which

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X represents halogen, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, haloalkyl, haloalkoxy, haloalkenyloxy, nitro or cyano,

Y represents in each case optionally substituted aryl or hetaryl,

W and Z independently of one another represent hydrogen, halogen, alkyl, alkoxy, haloalkyl, haloalkoxy, nitro or cyano,

A represents hydrogen, in each case optionally substituted alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl, alkylthioalkyl, saturated or unsaturated, optionally substituted cycloalkyl in which optionally at least one ring atom is replaced by a heteroatom, or represents in each case optionally halogen-, alkyl-, haloalkyl-, alkoxy-, haloalkoxy-, cyano- or nitro-substituted aryl, arylalkyl or hetaryl,

D represents hydrogen or an optionally substituted radical from the group consisting of alkyl and alkenyl,

A and D together with the atoms to which they are attached represent a saturated or unsaturated ring which optionally contains at least one heteroatom and which is unsubstituted or substituted in the A,D moiety,

G represents halogen or nitro.

- 2. Compounds of the formula (I) according to Claim 1 in which
  - W represents hydrogen, halogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,
  - X represents halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-halo-

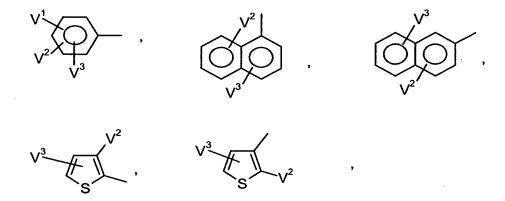
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alkoxy or cyano,

## Y represents one of the radicals



- V<sup>1</sup> represents hydrogen, halogen, C<sub>1</sub>-C<sub>12</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulphinyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, nitro, cyano or represents phenyl or phenoxy, each of which is optionally mono- or disubstituted by halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, nitro or cyano,
- $V^2$  and  $V^3$  independently of one another represent hydrogen, halogen,  $C_1$ - $C_6$ -Alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_4$ -haloalkyl or  $C_1$ - $C_4$ -haloalkoxy,
- Z represents hydrogen, halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, nitro or cyano,
- A represents in each case optionally halogen-substituted C<sub>1</sub>-C<sub>12</sub>-alkyl, C<sub>3</sub>-C<sub>8</sub>-alkenyl, C<sub>1</sub>-C<sub>10</sub>-alkoxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, poly-C<sub>1</sub>-C<sub>8</sub>-alkoxy-C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkylthio-C<sub>1</sub>-C<sub>6</sub>-alkyl, optionally halogen-, C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>2</sub>-haloalkyl- or C<sub>1</sub>-C<sub>6</sub>-alkoxy-substituted C<sub>3</sub>-C<sub>8</sub>-cycloalkyl in which optionally one or two not directly adjacent ring members are replaced by oxygen and/or sulphur or represents phenyl or phenyl-C<sub>1</sub>-C<sub>6</sub>-alkyl, each of which is optionally substituted by halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, cyano or nitro,
- D represents hydrogen, in each case optionally halogen-substituted  $C_1$ - $C_{12}$ -alkyl or  $C_3$ - $C_8$ -alkenyl,

A and D together represent in each case optionally substituted C<sub>3</sub>-C<sub>6</sub>-alkanediyl or

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C<sub>3</sub>-C<sub>6</sub>-alkenediyl in which optionally one methylene group is replaced by oxygen or sulphur,

possible substituents being in each case:

hydroxyl, halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy or one of the following groups:

$$C=0$$
;  $C=0$ ;  $C=N-N R^3$ ;  $C=N-OR^1$ 

in which

L represents oxygen or sulphur,

 $R^1$ ,  $R^2$  independently of one another represent  $C_1$ - $C_6$ -alkyl,

 $R^3$  represents  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -haloalkyl, optionally halogen-, alkyl-, alkoxy-, haloalkyl-, haloalkoxy-, cyano- or nitro-substituted phenyl or represents the groups  $CO_2R^1$  or  $CON_{R^2}^{-1}$ ,

R<sup>4</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl

15 G represents chlorine, bromine or nitro.

- 3. Compounds of the formula (I) according to Claim 1 in which
  - W represents hydrogen, chlorine, bromine or C<sub>1</sub>-C<sub>4</sub>-alkyl,
  - X represents fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-halo-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy or cyano,
- 20 Y represents the radical

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$$V^1$$
 or  $V^2$ 

- V<sup>1</sup> represents hydrogen, fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>2</sub>-haloalkyl, C<sub>1</sub>-C<sub>2</sub>-haloalkoxy, nitro or cyano, or represents phenyl or phenoxy, each of which is optionally monosubstituted by chlorine,
- V<sup>2</sup> represents hydrogen, fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>2</sub>-haloalkyl or C<sub>1</sub>-C<sub>2</sub>-haloalkoxy,
- Z represents hydrogen, fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>2</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>2</sub>-haloalkoxy,
- A represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy-C<sub>1</sub>-C<sub>6</sub>-alkyl, each of which is optionally mono- to pentasubstituted by fluorine or chlorine, represents C<sub>3</sub>-C<sub>7</sub>-cycloalkyl which is optionally mono- or disubstituted by fluorine, chlorine, C<sub>1</sub>-C<sub>4</sub>-alkyl, trifluoromethyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy and in which optionally one ring member is replaced by oxygen or sulphur or represents phenyl or phenyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy,
- D represents hydrogen, represents C<sub>1</sub>-C<sub>8</sub>-alkyl or C<sub>3</sub>-C<sub>6</sub>-alkenyl, each of which is optionally mono- to pentasubstituted by fluorine or chlorine,
- A and D together represent optionally substituted C<sub>3</sub>-C<sub>5</sub>-alkanediyl or C<sub>3</sub>-C<sub>5</sub>-alkenediyl in which optionally one methylene group may be replaced by oxygen or sulphur, possible substituents being hydroxyl, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or the groups:

C=O; 
$$C = C$$
 ;  $C = C - C$  or  $C = N - OR^1$ 

$$R^1 \qquad R^2 \qquad R^2$$

where

# $R^1$ and $R^2$ independently of one another represent $C_1$ - $C_4$ -alkyl

or represent the group 
$$N$$

- G represents chlorine, bromine or nitro.
- 4. Compounds of the formula (I) according to Claim 1 in which
  - W represents hydrogen, chlorine, methyl or ethyl,
    - X represents chlorine, methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, n-propoxy, isopropoxy, trifluoromethyl, difluoromethoxy, trifluoromethoxy or cyano,
    - Y represents the radical

or 
$$\sqrt[N]{1}$$

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V<sup>1</sup> represents hydrogen, fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, tert-butyl, methoxy, ethoxy, n-propoxy, isopropoxy, SO<sub>2</sub>C<sub>2</sub>H<sub>5</sub>, SCH<sub>3</sub>, trifluoromethyl, trifluoromethoxy, nitro, cyano, or represents phenoxy which is optionally monosubstituted by chlorine,

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- V<sup>2</sup> represents hydrogen, fluorine, chlorine, methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, trifluoromethyl or trifluoromethoxy,
- Z represents hydrogen, fluorine, chlorine or methyl,
- A represents  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_4$ -alkenyl  $C_1$ - $C_2$ -alkoxy- $C_1$ - $C_2$ -alkyl or  $C_3$ - $C_6$ -cycloalkyl,

- D represents hydrogen, methyl, ethyl or n-propyl,
- A, D together represent C<sub>3</sub>-C<sub>5</sub>-alkanediyl which is optionally substituted by fluorine and/or C<sub>1</sub>-C<sub>6</sub>-alkyl and in which optionally one carbon atom is replaced by oxygen,

or represent the group 
$$N$$

- G represents chlorine or bromine.
- 5. Compounds of the formula (I) according to Claim 1 in which
  - W represents hydrogen, methyl or ethyl,
  - X represents chlorine, methyl or ethyl,
    - Y represents the radical

$$V^1$$
 or  $V^2$ 

- V<sup>1</sup> represents hydrogen, fluorine, chlorine, methyl, isopropyl, methoxy, SO<sub>2</sub>C<sub>2</sub>H<sub>5</sub>, SCH<sub>3</sub>, trifluoromethyl, trifluoromethoxy, nitro, or represents phenoxy which is optionally monosubstituted by chlorine,
- V<sup>2</sup> represents hydrogen, fluorine, chlorine, methoxy or trifluoromethyl,
- Z represents hydrogen or methyl,
- A represents C<sub>1</sub>-C<sub>6</sub>-alkyl,
- D represents methyl or ethyl, or
- A, D together represent optionally fluorine- and/or methyl-substituted C<sub>3</sub>-C<sub>5</sub>-alkanediyl in which optionally one carbon atom is replaced by oxygen

or represent the group 
$$N$$
— $N$ — $N$ 

- G represents chlorine.
- 6. Process for preparing compounds of the formula (I) according to Claim 1, characterized in that, to obtain

### A) compounds of the formula (I)

$$D-N \xrightarrow{Q} X \xrightarrow{Z} Y$$

$$Q \xrightarrow{Q} X \xrightarrow{Z} Z$$

in which

A, D, W, X, Y and Z, are as defined above

and

G represents halogen,

compounds of the formula (II)

$$\begin{array}{c|c} A & OH & X \\ \hline D-N & Z \\ \hline \end{array}$$

in which

A, D, W, X, Y and Z are as defined above

are reacted with halogenating agents in the presence of a solvent and, if appropriate, in the presence of a free-radical initiator,

### B) compounds of the formula (I)

$$D-N$$

$$G$$

$$X$$

$$Z$$

$$(I)$$

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A, D, W, X, Y and Z are as defined above

and

G represents nitro,

compounds of the formula (II)

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in which

A, D, W, X, Y and Z are as defined above

are reacted with nitrating agents, such as, for example, fuming nitric acid, in the presence of a solvent.

- 7. Compositions for controlling pests, unwanted vegetation and/or unwanted microorganisms, characterized in that they comprise at least one compound of the formula (I) according to Claim 1.
  - 8. Method for controlling animal pests, unwanted vegetation and/or unwanted microorganisms, characterized in that compounds of the formula (I) according to Claim 1 are allowed to act on pests, unwanted vegetation, unwanted microorganisms and/or their habitat.
  - 9. Use of compounds of the formula (I) acording to Claim 1 for controlling animal pests, unwanted vegetation and/or unwanted microorganisms.
- 10. Process for preparing compositions for controlling pests, unwanted vegetation and/or unwanted microorganisms, characterized in that compounds of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.
  - 11. Use of compounds of the formula (I) according to Claim 1 for preparing compositions for controlling pests, unwanted vegetation and/or unwanted microorganisms.
  - 12. Compositions, comprising an effective amount of a combination of active compounds

comprising, as components,

(a') at least one 4-biphenyl-substituted-4-substituted pyrazolidine-3,5-dione derivative of the formula (I) in which A, D, G, W, X, Y and Z are as defined above,

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and

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(b') at least one crop plant compatibility-improving compound from the following group of compounds:

4-dichloroacetyl-1-oxa-4-azaspiro[4.5]decane (AD-67, MON-4660), 1-dichloroacetylhexahydro-3,3,8a-trimethylpyrrolo[1,2-a]pyrimidin-6(2H)-one (dicyclonon, BAS-145138), 4-dichloroacetyl-3,4-dihydro-3-methyl-2H-1,4-benzoxazine (benoxacor), 1-methylhexyl 5-chloroquinoline-8-oxyacetate (cloquintocet-mexyl - cf. also related compounds in EP-A-86750, EP-A-94349, EP-A-191736, EP-A-492366), 3-(2-chlorobenzyl)-1-(1-methyl-1-phenylethyl)urea (cumyluron), α-(cyanomethoximino)phenylacetonitrile (cyometrinil), 2,4-dichlorophenoxyacetic acid (2,4-D), 4-(2,4-dichlorophenoxy)butyric acid (2,4-DB), 1-(1-methyl-1-phenylethyl)-3-(4-methylphenyl)urea (daimuron, dymron), 3,6-dichloro-2-methoxybenzoic acid (dicamba), S-1-methyl 1-phenylethyl piperidine-1-thiocarboxylate (dimepiperate), 2,2-dichloro-N-(2-oxo-2-(2-propenylamino)ethyl)-N-(2-propenyl)acetamide (DKA-24), 2,2-dichloro-N,N-di-2-propenylacetamide (dichlormid), 4,6-dichloro-2-phenylpyrimidine (fenclorim), ethyl 1-(2,4-dichlorophenyl)-5-trichloromethyl-1H-1,2,4-triazole-3-carboxylate (fenchlorazole-ethyl - cf. also related compounds in EP-A-174562 and EP-A-346620), phenylmethyl 2-chloro-4-trifluoromethylthiazole-5-carboxylate (flurazole), 4-chloro-N-(1,3-dioxolan-2-yl-methoxy)-α-trifluoroacetophenone oxime (fluxofenim), 3-dichloroacetyl-5-(2-furanyl)-2,2-dimethyloxazolidine MON-13900), (furilazole, ethyl 4,5-dihydro-5,5-diphenyl-3-isoxazolecarboxylate (isoxadifen-ethyl - cf. also related compounds in WO-A-95/07897), 1-(ethoxycarbonyl)ethyl 3,6-dichloro-2-methoxybenzoate (lactidichlor), (4-chloro-o-tolyloxy)acetic acid (MCPA), 2-(4-chloro-o-tolyloxy)propionic acid (mecoprop), diethyl 1-(2,4-dichorophenyl)-4,5-dihydro-5-methyl-1H-pyrazole-3,5-dicarboxylate (mefenpyr-diethyl -cf. also related compounds in WO-A-91/07874), 2-dichloromethyl-2-methyl-1,3-dioxolane (MG-191), 2-propenyl-1-oxa-4-azaspiro[4.5]decane-4-carbodithioate (MG-838),1,8-naphthalic anhydride, α-(1,3-dioxolan-2-ylmethoximino)phenylacetonitrile (oxabetrinil), 2,2-dichloro-N-(1,3-dioxolan-2-yl-methyl)-N-(2-propenyl)acetamide (PPG-1292), 3-dichloroacetyl-2,2-dimethyloxazolidine (R-28725), 3-dichloroacetyl-2,2,5-trimethyloxazolidine (R-29148), 4-(4-chloro-o-tolyl)butyric acid, 4-(4-chlorophenoxy)butyric acid, diphenylmethoxyacetic acid, methyl diphenylmethoxyacetate, ethyl diphenylmethoxyacetate, methyl 1-(2-chlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate.

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ethyl 1-(2,4-dichlorophenyl)-5-methyl-1H-pyrazol-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-isopropyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-(1,1-dimethylethyl)-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate (cf. also related compounds in EP-A-269806 and EP-A-333131), ethyl 5-(2,4-dichlorobenzyl)-2-isoxazoline-3-carboxylate, ethyl 5-phenyl-2-isoxazoline-3-carboxylate, ethyl 5-(4-fluorophenyl)-5-phenyl-2-isoxazoline-3-carboxylate (cf. also related compounds in WO-A-91/08202), 1,3-dimethylbut-1-yl 5-chloroquinoline-8-oxyacetate, 4-allyloxybutyl 5-chloroquinoline-8-oxyacetate, 1-allyloxyprop-2-yl 5-chloroquinoline-8-oxyacetate, methyl 5-chloroquinoxaline-8-oxyacetate, ethyl 5-chloroquinoline-8-oxyacetate, allyl 5-chloroquinoxaline-8-oxyacetate, 2-oxoprop-1-yl 5-chloroquinoline-8-oxyacetate, diethyl 5-chloroquinoline-8-oxymalonate, diallyl 5-chloroquinoxaline-8-oxymalonate, diethyl 5-chloroquinoline-8-oxymalonate (cf. also related compounds in EP-A-582198), 4-carboxychroman-4-ylacetic acid (AC-304415, cf. EP-A-613618), 4-chlorophenoxyacetic acid, 3,3'-dimethyl-4-methoxybenzophenone, 1-bromo-4-chloromethylsulphonylbenzene, 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3-methylurea (also known as N-(2-methoxybenzoyl)-4-[(methylaminocarbonyl)-1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3,3-diamino]benzenesulphonamide), 1-[4-(N-4,5-dimethylbenzoylsulphamoyl)phenyl]-3-methylurea, methylurea, 1-[4-(N-naphthylsulphamoyl)phenyl]-3,3-dimethylurea, N-(2-methoxy-5-methylbenzoyl)-4-(cyclopropylaminocarbonyl)benzenesulphonamide,

and/or one of the following compounds, defined by general formulae,

of the general formula (IIa)

$$(X^1)_m$$
  $(IIa)$ 

or of the general formula (IIb)

$$X^3$$
 $X^2$ 
 $X^2$ 
 $X^3$ 
 $X^2$ 
 $X^2$ 
 $X^3$ 
 $X^3$ 

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or of the formula (IIc)

$$R^{16} \xrightarrow{N} R^{17}$$

$$R^{18}$$
(IIc)

where

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m represents a number 0, 1, 2, 3, 4 or 5,

A<sup>1</sup> represents one of the divalent heterocyclic groupings shown below

$$R^{19}$$
 $OR^{20}$ 
 $R^{19}$ 
 $OR^{20}$ 
 $R^{19}$ 
 $OR^{20}$ 
 $R^{19}$ 
 $OR^{20}$ 
 $OR^{20}$ 

n represents a number between 0 and 5,

A<sup>2</sup> represents optionally C<sub>1</sub>-C<sub>4</sub>-alkyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkoxy-carbonyl- and or C<sub>1</sub>-C<sub>4</sub>-alkenyloxy-carbonyl- substituted alkanediyl having 1 or 2 carbon atoms,

R<sup>14</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di-(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino,

R<sup>15</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>7</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy-C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di-(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino,

 $R^{16}$  represents in each case optionally fluorine-, chlorine- and/or bromine-substituted  $C_1$ - $C_4$ -alkyl,

R<sup>17</sup> represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl,

represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl, R<sup>17</sup> and R<sup>18</sup> also together optionally represents C<sub>3</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl,

each of which is optionally substituted by C<sub>1</sub>-C<sub>4</sub>-alkyl, phenyl, furyl, a fused benzene ring or by two substituents which, together with the C atom to which they are attached, form a 5- or 6-membered carbocycle,

R<sup>19</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,

 $R^{20}$  represents hydrogen, optionally hydroxyl-, cyano-, halogen- or  $C_1$ - $C_4$ -alkoxy-substituted  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl or tri- $(C_1$ - $C_4$ -alkyl)-silyl,

R<sup>21</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,

X<sup>1</sup> represents nitro, cyano, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,

 $X^2$  represents hydrogen, cyano, nitro, halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy or  $C_1$ - $C_4$ -haloalkoxy,

 $X^3$  represents hydrogen, cyano, nitro, halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy or  $C_1$ - $C_4$ -haloalkoxy,

and/or the following compounds, defined by general formulae,

of the general formula (IId)

$$O \bigvee_{R^{24}}^{R^{23}} (X^5)_v \bigvee_{SO_2}^{R^{22}} (X^4)_t$$
 (IIId)

or the general formula (IIe)

$$R^{25} \xrightarrow{N} (X^5)_v$$

$$SO_2$$

$$X^4)_t$$
(IIe)

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- t represents a number between 0 and 5,
- v represents a number between 0 and 5,
- R<sup>22</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,
- $R^{23}$  represents hydrogen or  $C_1$ - $C_4$ -alkyl,
  - R<sup>24</sup> represents hydrogen, in each case optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di-(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino, or in each case optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyloxy, C<sub>3</sub>-C<sub>6</sub>-cycloalkylthio or C<sub>3</sub>-C<sub>6</sub>-cycloalkylamino,
  - $R^{25}$  represents hydrogen, optionally cyano-, hydroxyl-, halogen- or  $C_1$ - $C_4$ -alkoxy-substituted  $C_1$ - $C_6$ -alkyl, in each case optionally cyano-, or halogen-substituted  $C_3$ - $C_6$ -alkynyl, or optionally cyano-, halogen- or  $C_1$ - $C_4$ -alkyl-substituted  $C_3$ - $C_6$ -cycloalkyl,
  - R<sup>26</sup> represents hydrogen, optionally cyano-, hydroxyl-, halogen- or  $C_1$ - $C_4$ -alkoxy-substituted  $C_1$ - $C_6$ -alkyl, in each case optionally cyano- or halogen-substituted  $C_3$ - $C_6$ -alkenyl or  $C_3$ - $C_6$ -alkynyl, optionally cyano-, halogen- or  $C_1$ - $C_4$ -alkyl-substituted  $C_3$ - $C_6$ -cycloalkyl, or optionally nitro-, cyano-, halogen-,  $C_1$ - $C_4$ -alkyl-,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy- or  $C_1$ - $C_4$ -haloalkoxy-substituted phenyl, or together with  $R^{32}$  represents in each case optionally  $C_1$ - $C_4$ -alkyl-substituted  $C_2$ - $C_6$ -alkanediyl or  $C_2$ - $C_5$ -oxaalkanediyl,
  - X<sup>4</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, and
  - X<sup>5</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.
- 13. Compositions according to Claim 12, where the crop plant compatibility-improving compound is selected from the following group of compounds:
  - cloquintocet-mexyl, fenchlorazole-ethyl, isoxadifen-ethyl, mefenpyr-diethyl, furilazole, fenclorim, cumyluron, dymron or the compounds

and

- 14. Compositions according to Claim 12 or 13 where the crop plant compatibility-improving compound is cloquintocet-mexyl or mefenpyr-diethyl.
  - 15. Method for controlling unwanted vegetation, characterized in that a composition according to Claim 12 is allowed to react on the plants or their habitat.
  - 16. Use of a composition according to Claim 12 for controlling unwanted vegetation.
- Method for controlling unwanted vegetation, characterized in that a compound of the formula (I) according to Claim 1 and the crop plant compatibility-improving compound as set forth in Claim 12 are allowed to act on the plants or their habitat separately, one soon after the other.